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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/309,155	05/10/99	ZAVRACKY M	KPN97-04A5

EXAMINER	
WU, X	
ART UNIT	PAPER NUMBER
2674	9

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/309,155	ZAVRACKY ET AL.
Examiner	**Art Unit**
Xiao Wu	2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *THREE* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Aug 20, 2001* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-18* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "the step of flashing a backlight commences prior to commencing of the step of clearing the image from the display" is contradictory to claim 1 since the claim 1 recites clearing the image from the display and then flashing the light source.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Stewart et al (US Patent No. 5,337,068).

As to claims 1, 12-13, Stewart discloses a method of displaying an image comprising the steps of: providing a matrix liquid crystal display; writing an image to the display; clearing the image from the display; flashing a light source; and repeating the steps of writing; clearing and flashing to producing a second image (see Fig. 6).

As to claim 2, Stewart discloses the steps of allowing the liquid crystal image to rotate towards an equilibrium prior to flashing the light source (column 11, line 57 to column 12, line 2).

As to claim 3, Stewart discloses the flashing of the light source ends before the writing of the next image (see Fig. 6).

As to claim 4, Stewart discloses the flashing of the light source continuous for a specific time period of the writing of the next image (Fig. 6).

As to claim 5, Stewart discloses the liquid crystal display is an active matrix LCD having a plurality of pixel electrodes, counter electrode and an interposed liquid crystal (see Fig. 2b).

As to claims 6 and 7, Stewart discloses the step of clearing the image from the display comprising the step of initializing the pixel electrodes to a set voltage (Fig. 6).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al (US Patent No. 5,337,068).

Stewart does not specifically discloses the flashing rate is 165 subframes per second. However, it would have been obvious to one of ordinary skill in the art to have designed a suitable range of the flashing rate in order to avoid a flickering.

7. Claims 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al (US Patent No. 5,337,068) in view of Ross (US Patent No. 4,917,469).

It is noted that Stewart does not disclose sensing the properties of the liquid crystal. Ross is cited to teach a LCD device with a sensor for sensing the liquid crystal. It would have been obvious to one of ordinary skill in the art to have modified Stewart with the features of the temperature sensor as taught by Stewart because the temperatures sensor can provide a feedback signal to stabilize the LCD without a temperature effect.

8. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al (US Patent No. 5,337,068) in view of Kaneko (US Patent No. 6,151,004).

Note the discussion of Stewart above. Stewart does not specifically disclose switching the applied voltage to the counter electrode panel after every subframe. Kaneko is cited to teach a LCD device with a light source control similar to Stewart. Kaneko further discloses the two voltage levels are applied to counter electrode after every subframe (see Fig. 3). It would have

been obvious to one of ordinary skill in the art to have modified Stewart with the features of the variable control for the counter electrode as taught by Kaneko because the AC driving can prolong the life of the LCD.

9. Applicant's arguments filed 8/20/2001 have been fully considered but they are not persuasive.

Applicant argues that Fig. 6 of Stewart fails to disclose that the clearing of the image from the display as a separate and distinct step from the step of writing an image to the display. This argument is not persuasive. As shown in Fig. 6, red color data first applied to the display with voltage level 1, and then zero voltage applied to the same electrode, after that, a voltage is following to apply to the light source. Therefore, Steward clearly discloses the steps of writing an image to the display; clearing the image from the display; flashing a light source as required in claims.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

xw

October 5, 2001.

XIAO WU
PRIMARY EXAMINER
ART UNIT 2674